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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, DUC M

ART UNIT

PAPER NUMBER

2618

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/748,988	Applicant(s) GOREN, DAVID P.	
	Examiner DUC M. NGUYEN	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1 and 8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to applicant's response filed on 6/25/08. Claims 1, 8-14 are now pending in the present application. **This action is made final.**

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims **1, 8, 11-13** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claim 1, the claim recites the limitation of "wherein no portion of at least one of the non-intersecting antenna patterns overlaps a portion of another of the non-intersecting antenna patterns", this limitation is **never** described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Here, due to the nature of electromagnetic wave traveling in the air, the wave would be reflected, scattered upon touching an object or surfaces of the ground or wall. Therefore, theoretically and practically, it is believed that the antenna patterns as shown Fig. 2 would overlap somewhere in the space of a facility or the like.

It is suggested that Applicant uses a positive limitation (i.e, antenna patterns interleaved in opposite directions) rather than a **negative** limitation to overcome a prior art.

Claim Rejections - 35 USC 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1, 8, 11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Hassett et al (US 5,406,275)**.

Regarding claim **1**, **Hassett** teaches a wireless network wherein mobile units are provided with radios for transmitting and receiving data communications messages between said mobile units and fixed access points (see Fig. 1 wherein the “vehicle transceiver” would on the claimed “mobile unit”, the stationary transceiver 18-22” would read on the claimed “fixed access points”), and wherein said mobile units are located using signal strength for radio communications between said mobile units and said access points (see col. 4, lines 16-20 and col. 7, lines 9-17), the improvement wherein at least some of said access points are provided with antennas having antenna patterns with selected pattern shapes including horizontally offset non-intersecting directional antenna patterns for enhancing location of said mobile units (see Figs. 1-2 and col. 4, lines 46-51).

Here, since the toll booth plaza in Hassett would obviously comprise a LAN, it is clear that the wireless network in Hassett would be applicable to a wireless LAN and would work equally well. Therefore, the claimed limitations are made obvious by Hassett, noting that the “local area network” recitation has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951).

Further, it would have been obvious to one skilled in the art at the time the invention was made to modify Hassett for designing antenna patterns such that no portion of at least one of the non-intersecting antenna patterns overlaps a portion of another of the non-intersecting antenna patterns as claimed, for further improving the performance of the system by minimizing interferences as much as possible.

Regarding claim **8**, **Hassett** would teach said horizontally offset directional beams are horizontally offset in position as claimed (see Fig. 1).

Regarding claim **11**, **Hassett** would teach said antennas locating at selected heights for achieving selected pattern shapes as claimed (see Fig. 1).

Regarding claim **12**, **Hassett** would teach an axis of each of directional antenna patterns are arranged in parallel relation to each other as claimed (see Fig. 1).

Regarding claim **13**, **Hassett** would teach a first group of antenna patterns (i.e, a group of odd numbered antennas) radiate between a second group of antenna patterns (i.e, a group of even numbered antennas) as claimed (see Fig. 1).

3. Claims **9-10** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Hassett** in view of **Robinson** (US 6,700,493).

Regarding claim **9**, **Hassett** would teach all the claimed limitations, see claim 8 above, except for some of antennas are mounted near the peripheral of a facility. However, it is noted that since **Hassett** suggested that the method can be applied for **tracking packages** (see col. 9, lines 45-46). Therefore, it would have been obvious that for tracking packages inside a facility in the similar way as disclosed by **Robinson** (see Fig. 7 and col. 7, lines 40-60), some of the antennas in **Hassett** would obviously be mounted near the peripheral of a facility as claimed, for optimizing the coverage area of a directional antenna beam in an indoor facility having rectangular shapes.

Regarding claim **10**, the claim is rejected for the same reason as set forth in claim 9 above. In addition, it would have been obvious to one skilled in the art at the time the invention was made to modify **Hassett** for providing said horizontally offset directional beams in a horizontally offset in position to correspond to aisles in a facility as claimed, for optimizing the coverage area of the directional antenna beam with the rectangular shape of the aisle.

4. Claims **9-10** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Hassett** in view of **Chaco et al** (US 5,455,851).

Regarding claim **9**, **Hassett** would teach all the claimed limitations, see claim 8 above, except for some of antennas are mounted near the peripheral of a facility. However, it is noted that since **Hassett** suggested that the method can be applied for **tracking packages** (see col. 9, lines 45-46). Therefore, it would have been obvious that for tracking objects inside a facility in the similar way as disclosed by **Chaco** (see Fig. 1), some of the antennas in **Hassett** would obviously be mounted near the peripheral of a facility as claimed, for optimizing the coverage area of a directional antenna beam in an indoor facility. Also note for a LAN and the horizontally offset non-intersecting directional antenna patterns apparently illustrated by dotted lines in Fig. 1 of **Chaco**.

Regarding claim **10**, the claim is rejected for the same reason as set forth in claim 9 above. In addition, it would have been obvious to one skilled in the art at the time the invention was made to modify **Hassett** for providing said horizontally offset directional beams in a horizontally offset in position to correspond to aisles in a facility as claimed, for optimizing the coverage area of the directional antenna beam with the rectangular shape of the aisle.

Allowable Subject Matter

5. Claim 14 is allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 1, 8-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. **Any response to this final action should be mailed to:**

Box A.F.

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or **draft** communications).

Art Unit: 2618

Hand-delivered responses should be brought to Customer Service Window,
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner
should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893,
Monday-Thursday (9:00 AM - 5:00 PM).

Or to Nay Muang (Supervisor) whose telephone number is (571) 272-7882.

/Duc M. Nguyen/

Primary Examiner, Art Unit 2618

Aug 6, 2008